147529

SUBJECT: **Advance Notice of Proposed Rulemaking**
**23 CFR 650 FHWA Docket No. FHWA-2001-8954** – 47
**National Bridge Inspection Standards**

DATE: December 24, 2001

Thank you for the opportunity to comment on the proposed rulemaking for revisions to the National Bridge Inspection Standards.

We have the following answers to your questions:

**APPLICATION OF STANDARDS**

**1. Should the FHWA develop its own definition of a bridge for the purpose of inspection and reporting? Should the FHWA definition change the way the bridge length is determined or what the minimum bridge length should be for reporting purposes?**

No. At this time the definition of a bridge is consistent in 3 locations. The current NBIS, AASHTO, and New York State Law all define a bridge the same way. Any change in this definition would unnecessarily complicate the task of effectively managing our comprehensive bridge program. While we agree that structures under 20 feet long are an important part of our infrastructure and should be inspected, they are not generally as complex as longer bridges and therefore do not require the same qualifications of inspection personnel and level of inspection intensity as the bridges included in the NBIS.

**2. What impact will the possible inclusion of more bridges be (1) on the public authorities complying with this as an NBIS requirement, (2) or on the FHWA which maintains the inventory, (3) or on the HBRRP funds?**

This would increase the number of structures by many thousands. New York State spends more than $35 Million annually in HBRR money on bridge inspection. This amount would increase significantly for the increased number of structures.

**INSPECTION PROCEDURES**

**3. What impact will changing the underwater inspection intervals have on public authorities complying with this as an NBIS requirement?**

We feel that the 5 year interval is the appropriate frequency to ensure a safe infrastructure. Further to that, bridges which exhibit a vulnerability to underwater problems should receive inspections on some more frequent interval. We would not disagree with some provision, similar to the exception granted for general inspections, in the NBIS to allow for an extended inspection cycle for the underwater inspection of bridges which meet certain conditions.

**4. What, if any, would be the impact on public authorities complying with evaluation of scour at bridges criteria within the NBIS regulation?**

The inclusion of T 5140.23 within the NBIS regulation would not impact New York State, however, we feel only portions affecting existing bridges in the Technical Advisory should be considered for inclusion in the NBIS.

**5. Should the 4 year interval be increased so that more bridges would be eligible for the extended inspection cycle? What would be a reasonable interval? What impact would this have on the safety of bridges?**

We feel that the 4 year cycle is appropriate for certain bridges. However, the requirements spelled out in T 5140.21 for a bridge to be granted a 4 year inspection interval should be revisited. Specifically, span length limitations and bridge age as well as the requirement that the bridge owner agree with the extension. These restrictions unnecessarily preclude many bridges from being eligible for the 4 year inspection cycle.

## QUALIFICATIONS OF PERSONNEL

**6. Should the individual in charge of the inspection and reporting who is a PE be required to have the same training as bridge inspectors and have additional experience in bridge inspection? Should the NBIS regulation be more specific as to the discipline of the professional engineer responsible for these bridge inspections and what impact would this change have on public authorities complying with this?**

The individual in charge of the inspection and reporting should be a licensed Professional Engineer with 5 years of bridge experience in design, construction, inspection or other bridge engineering related work.

Bridge inspections should be performed by a Professional Engineer with 3 years of bridge experience in design, construction, inspection or other bridge engineering related work.

As for the discipline of the professional engineer, many states do not classify their professional engineers and therefore specifying a discipline could be problematic. Requiring bridge related experience should be sufficient.

**7. Clarification of "bridge inspection assignments in a responsible capacity?"**

We recommend "responsible capacity" to mean assignments inspecting bridges under the direct supervision of a qualified bridge inspector.

**8. The FHWA is considering requiring certification training in proportion to the complexity of the bridge structure being inspected.....What impact would this change have on public authorities complying with this as an NBIS requirement?**

Due to the many different bridge types and bridge complexities and the large number of engineers doing bridge inspection, it would be almost impossible to have a system of varying criteria for approval of inspectors based on structure type. As noted above, for all bridges meeting the definition of a bridge in the present NBIS, the inspections should be performed by a Professional Engineer with bridge experience in design, construction, inspection or other bridge engineering related work.

This Professional Engineer is capable of assessing what level of training is required to inspect a structure, relative to its complexity, and is responsible to ensure that the appropriate level of training has been met. For structures that do not qualify as a bridge in the present NBIS (span less than 20 ft.) and might qualify as a "less complex" bridge, the level of training for inspectors should be left up to the individual states.

**9. Should those performing underwater inspections be qualified licensed professional engineers? What impact would these proposed changes have on public authorities complying with this?**

Requiring that a Professional Engineer be the person "in the water" would make staffing very difficult and would translate to a substantial increase in cost. Allowing non-PE divers under the supervision of a Professional Engineer who is in audio and visual contact with the diver is sufficient to ensure quality inspections.

**INSPECTION REPORT**

**10. What if any would the impact be on public authorities complying with only allowing the inspector who was out in the field to change the inspection report as an NBIS requirement?**

Presently, our procedure allows for the Quality Control Engineer, a Licensed Professional Engineer, to make a change on an inspection report only after conferring with the inspector who was out in the field. We would not object to the NBIS requiring this change.

**INVENTORY**

**11. Should the reporting requirements for the NBIS be changed and what, if any, would the impact be on public authorities complying with this?**

No change is required in the inventory procedures.

## ADDITIONAL GENERAL QUESTIONS

**12. Does the current regulation at 23 CFR part 650, subpart C, correctly address the requirements of 23 U.S.C. 151, national bridge inspection program?**

Yes.

**13. What improvements would you recommend to the bridge inspection procedures?**

None.

**14. What specific procedures would you recommend to enhance the NBIS regulations?**

None.

: